



29. As a legal consequence of Defendant's infringement, Plaintiff is entitled to compensation for no less than a reasonable royalty, as well as pre-judgment interest and a preliminary and permanent injunction. In the event that the Court does not exercise its equitable discretion to award a permanent injunction, then Plaintiff is entitled to a judgment that includes a sum equal to the total projected value of a compulsory license for the life of the patent at a royalty rate to be determined by a jury, discounted to present value, to compensate Plaintiff for future infringement.

30. The infringement of the '846 Patent has been willful in that Defendant is fully aware of Plaintiff's rights, yet has continued to use the infringing IVR system in violation of the patent laws without a good faith basis for believing it does not infringe or the patent is invalid. This intentional refusal to respect Plaintiff's patent rights constitutes willful infringement under 35 U.S.C. §§ 284 and 285, thereby entitling Plaintiff to treble damages and attorneys' fees.

# **V. SECOND COUNT FOR INFRINGEMENT OF** **UNITED STATES PATENT NO. 6,665,640**

31. Plaintiff hereby incorporates by reference the allegations contained in paragraphs 1 through 25.

32. Plaintiff is the assignee of the U.S. Patent No. 6,665,640 ("the '640 Patent"), attached hereto as Exhibit 2, entitled "Interactive Speech Based Learning/Training System Formulating Search Queries Based on Natural Language Parsing of Recognized User Queries". Plaintiff owns and has standing and capacity to sue and recover damages for infringement under the '640 Patent.

33. Defendant has violated Plaintiff's patent rights by operating an IVR system covered by at least one claim of the '640 Patent. Wells Fargo's infringing IVR system has not been manufactured or authorized in any manner by the Plaintiff.

34. As a legal consequence of Defendant's infringement, Plaintiff is entitled to compensation for no less than a reasonable royalty, as well as pre-judgment interest and a preliminary and permanent injunction. In the event that the Court does not exercise its equitable discretion to award a permanent injunction, then Plaintiff is entitled to a judgment that includes a sum equal to the total projected value of a compulsory license for the life of the patent at a royalty rate to be determined by a jury, discounted to present value, to compensate Plaintiff for future infringement.

35. The infringement of the '640 Patent has been willful in that Defendant is fully aware of Plaintiff's rights, yet has continued to use the infringing IVR system in violation of the patent laws without a good faith basis for believing it does not infringe or the patent is invalid. This intentional refusal to respect Plaintiff's patent rights constitutes willful infringement under 35 U.S.C. §§ 284 and 285, thereby entitling Plaintiff to treble damages and attorneys' fees.

**VI. THIRD COUNT FOR INFRINGEMENT**  
**OF UNITED STATES PATENT NO. 7,050,977**

36. Plaintiff hereby incorporates by reference the allegations contained in paragraphs 1 through 25.

37. Plaintiff is the assignee of the U.S. Patent No. 7,050,977 ("the '977 Patent"), attached hereto as Exhibit 3, entitled "Speech-Enabled Server for Internet Website and Method". Plaintiff owns and has standing and capacity to sue and recover damages for infringement under the '977 Patent.

38. Defendant has violated Plaintiff's patent rights by operating an IVR system covered by at least one claim of the '977 Patent. Wells Fargo's infringing IVR system has not been manufactured or authorized in any manner by the Plaintiff.

39. As a legal consequence of Defendant's infringement, Plaintiff is entitled to compensation for no less than a reasonable royalty, as well as pre-judgment interest and a preliminary and permanent injunction. In the event that the Court does not exercise its equitable discretion to award a permanent injunction, then Plaintiff is entitled to a judgment that includes a sum equal to the total projected value of a compulsory license for the life of the patent at a royalty rate to be determined by a jury, discounted to present value, to compensate Plaintiff for future infringement.

40. The infringement of the '977 Patent has been willful in that Defendant is fully aware of Plaintiff's rights, yet has continued to use the infringing IVR system in violation of the patent laws without a good faith basis for believing it does not infringe or the patent is invalid. This intentional refusal to respect Plaintiff's patent rights constitutes willful infringement under 35 U.S.C. §§ 284 and 285, thereby entitling Plaintiff to treble damages and attorneys' fees.

**VII. FOURTH COUNT FOR INFRINGEMENT**  
**OF UNITED STATES PATENT NO. 7,277,854**

41. Plaintiff hereby incorporates by reference the allegations contained in paragraphs 1 through 25.

42. Plaintiff is the assignee of the U.S. Patent No. 7,277,854 ("the '854 Patent"), attached hereto as Exhibit 4, entitled "Speech Recognition System Interactive Agent". Plaintiff owns and has standing and capacity to sue and recover damages for infringement under the '854 Patent.

43. Defendant has violated Plaintiff's patent rights by operating an IVR system covered by at least one claim of the '854 Patent. Wells Fargo's infringing IVR system has not been manufactured or authorized in any manner by the Plaintiff.

44. As a legal consequence of Defendant's infringement, Plaintiff is entitled to compensation for no less than a reasonable royalty, as well as pre-judgment interest and a preliminary and permanent injunction. In the event that the Court does not exercise its equitable discretion to award a permanent injunction, then Plaintiff is entitled to a judgment that includes a sum equal to the total projected value of a compulsory license for the life of the patent at a royalty rate to be determined by a jury, discounted to present value, to compensate Plaintiff for future infringement.

45. The infringement of the '854 Patent has been willful in that Defendant is fully aware of Plaintiff's rights, yet has continued to use the infringing IVR system in violation of the patent laws without a good faith basis for believing it does not infringe or the patent is invalid. This intentional refusal to respect Plaintiff's patent rights constitutes willful infringement under 35 U.S.C. §§ 284 and 285, thereby entitling Plaintiff to treble damages and attorneys' fees.

### **VIII. DEMAND FOR JURY TRIAL**

46. Plaintiff hereby exercises its right to a jury trial under the Seventh Amendment to the United States Constitution, and pursuant to Fed. R. Civ. Proc., Rule 38, demands a jury trial in accordance therewith.

### **IX. PRAYER FOR RELIEF**

WHEREFORE, Plaintiff prays for:

a. A preliminary injunction, barring Defendant and all of its agents, officers, attorneys, successors, and assigns from manufacturing, importing or using any system (or components thereof) that infringes upon the '846, the '640, the '977 and the '854 Patents;

b. A permanent injunction, barring Defendant and all of its agents, officers, successors and assigns from manufacturing, importing or using any system

c. That Defendant be required to account to Plaintiff for all savings and revenues realized by Defendant and any subsidiary and any partner company of Defendant from the use of IVR systems infringing the '846, the '640, the '977 and the '854 Patents;

d. A judgment for compensatory damages, not less than reasonable royalty, suffered as a result of the patent infringement as well as prejudgment interest;

e. A judgment including a sum equal to the total projected value of a compulsory license for the life of the patents, discounted to present value, to compensate Plaintiff for future infringement in the event that a permanent injunction is not awarded;

f. Treble damages and attorneys' fees pursuant to 35 U.S.C. §§ 284 and 285 for willful infringement of the '846, the '640, the '977 and the '854 Patents by Defendant; and,

g. Any and all other relief that the Court deems proper.

Respectfully submitted,

**TROJAN LAW OFFICES**

by

Dated: February 6, 2008

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Attorney for Plaintiff,  
PHOENIX SOLUTIONS, INC.

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9 PHOENIX SOLUTIONS, INC.

10  
11 UNITED STATES DISTRICT COURT  
12 NORTHERN DISTRICT OF CALIFORNIA

13 PHOENIX SOLUTIONS, INC., a  
14 California corporation,

15 Plaintiff,

16 v.

17 WELLS FARGO & COMPANY, a  
18 Delaware corporation,

19 Defendant.

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28 COMPLAINT

ORIGINAL  
FILED

FEB 7 8 2008

E-FILED  
CLERK OF U.S. DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

CASE NO. 08 0863  
CV 08

COMPLAINT FOR DAMAGES AND  
INJUNCTIVE RELIEF FOR  
INFRINGEMENT OF U.S. PATENT  
NOS. 6,633,846, 6,665,640, 7,050,977  
AND 7,277,854 UNDER 35 U.S.C. §  
271 AND DEMAND FOR JURY  
TRIAL PURSUANT TO FED. R. CIV.  
PROC., RULE 38

1 Plaintiff, PHOENIX SOLUTIONS, INC. (hereinafter "Plaintiff" or  
2 "Phoenix"), hereby complains against Defendant, WELLS FARGO & COMPANY  
3 (hereinafter "Defendant" or "Wells Fargo"), as follows:

4 1. This is a civil action for patent infringement arising under the patent  
5 laws of the United States, 35 U.S.C. § 271 *et seq.*

### 6 **I. THE PARTIES**

7 2. Plaintiff is a corporation organized and existing under the laws of the  
8 State of California, with a place of business at 634 Georgia Avenue, Palo Alto,  
9 California, 94306.

10 3. Upon information and belief, Defendant is a corporation organized and  
11 existing under the laws of the State of Delaware with a place of business at 420  
12 Montgomery Street, San Francisco, California, 94163.

### 13 **II. FACTUAL BACKGROUND**

14 4. Plaintiff is the owner by assignment of U.S. Patent Nos. 6,633,846,  
15 6,665,640, 7,050,977, and 7,277,854 (hereinafter "Patents in Suit") directed to  
16 "speech recognition software".

17 5. Plaintiff Phoenix developed the next generation of speech recognition  
18 systems that give users the ability to have a verbal conversation with a computer  
19 about a subject on which the computer has been programmed to process and  
20 generate intelligent responses. One of the first applications of this new technology  
21 was its use in telephone customer service lines where the customer calls a computer  
22 and a "virtual customer service agent" answers the line and interacts with a caller  
23 using "natural speech" akin to a live person.

24 6. Phoenix encompasses the life work of a pioneer in the field of  
25 computer-based speech recognition, Dr. Ian Bennett. Originally from Jamaica, Dr.  
26 Bennett graduated with honors from the University of British Columbia and went  
27 on to receive his Master's and Doctorate degrees in electrical engineering from



Stanford University. While at Stanford, Dr. Bennett developed the first practical analog processor for speech compression. After graduation he held technical engineering positions with several high technology companies and contributed to device and product development. As a consultant to the Variable Speech Corp. of Tokyo, Japan, he contributed to the development of an analog speech compression VLSI speech processor used for audio compression in consumer speech recorders. In 1994, Dr. Bennett began the development of a natural language query system (NLQS). Subsequently, he founded Phoenix Solutions, where he guided the development of algorithms for statistics- and semantics-based signal processing of speech that allow a computer to take in natural speech questions and return answers that also sound like natural speech. Dr. Bennett developed various applications for his technology, including interactive conversational systems and interactive guides, intelligent tutoring systems and form-filling systems. Dr. Bennett is currently at the National Science Foundation serving as a Program Director within the Directorate of Engineering, Division of Industrial Innovation & Partnerships.

7. Defendant Wells Fargo is a financial services company that provides banking, insurance, investment, mortgage loan, and consumer finance services. In connection with its electronic services, Defendant (and/or others on its behalf) established and operates a number of customer support lines, which can be reached for example at (800) 642-4720 and upon information and belief, other toll-free phone numbers. The customer support lines employ a natural language interactive voice response (IVR) system that includes a virtual agent (hereinafter interchangeably referred to as "IVR system").

8. The Plaintiff's natural language IVR system is superior to conventional touch-tone systems because the caller can simply talk to the system using natural language. In contrast, touch-tone IVR systems require the caller to select from a series of choices using a more limited telephone keypad. IVR touch

1 tone systems are also less efficient since they require callers to listen to an entire  
2 menu of choices and wade through a series of menus before providing a response to  
3 the caller. Consumers hang up at a greater rate in frustration when they become  
4 lost in the maze of menus.

5 9. The alternative to touch tone menu systems is to employ live  
6 operators. When compared to live operators, the Plaintiff's IVR system is much  
7 more cost effective. Based upon industry data, it is estimated that Defendant's use  
8 of its current IVR system has allowed it to save 93% of the cost it previously  
9 incurred in providing its customer support line and Defendant's customer  
10 satisfaction has increased by 30%.

11 10. Upon information and belief, Defendant operates its IVR system using  
12 a combination of telephony hardware and computer server hardware that is  
13 specifically adapted by Defendant (and/or others on its behalf) to respond to spoken  
14 questions from callers concerning the Defendant's business. Such hardware uses  
15 supporting software that includes speech recognition and natural language engines  
16 used to understand the spoken questions from callers.

17 11. Upon information and belief, the speech recognition engine used by  
18 Defendant is distributed, so that some of the speech-processing operations for  
19 understanding callers are performed on a client computing system (such as  
20 telephony platform or other hardware) while other speech processing operations are  
21 performed on a separate server computing system. Upon information and belief,  
22 Defendant (and/or others on its behalf) configure such computing systems to  
23 customize what speech processing operations will take place on such respective  
24 hardware systems to maximize certain characteristics of the system, and to regulate  
25 how speech data from the callers is transferred between such systems.

26 12. When customers place calls to Defendant's IVR system, they can  
27 speak in a conversational style as if they were speaking to a real person.

Defendant's interactive virtual agent responds to the caller's questions in real-time by providing answers in natural speech. The virtual agent has been taught natural language dialogues based on information concerning Defendant's products provided by the Defendant and incorporated into the software. In this manner, the virtual agent can understand questions posed by customers concerning Defendant's products, and give relevant answers.

13. Defendant's IVR system uses a speech recognition engine to break down the customer's questions into specific words understood by the IVR system. For example, the speech recognition engine could determine that the user has said his or her account number. Defendant controls precisely what specific words its IVR system will understand as part of its vocabulary by configuring (and/or having others configure on its behalf) certain aspects of such client computing system and/or server computing system.

14. Defendant's IVR system employs a natural language engine to understand the meaning of the specific words spoken by its customers. The IVR system, by understanding the meaning and context of specific words, may determine that the customer is asking about a service related problem. Defendant controls precisely what interpretation the IVR system should give to various words spoken by its customers by configuring (and/or having others configure on its behalf) certain aspects of the client computing system and/or server computing system.

15. Based on determining the most likely meaning of the customer's specific question, the interactive virtual agent responds with a specific answer. The answer may take the form of an audible response from the agent, or it may take the form of the IVR system routing the caller to a live person working within the appropriate department (such as the service department in the example above). In all instances, Defendant alone controls precisely what responses and actions virtual

agent takes, and has configured (and/or has had others configure on its behalf) certain aspects of such client computing system and/or server computing system to provide such desired responses or actions.

16. Upon information and belief, Defendant also configured and controlled (and/or has had others configure and/or control on its behalf) other aspects of the virtual agent's overall behavior, including among other things, the gender, apparent age, speech rate, prosody, style and rate of response. These parameters are selected and controlled by Defendant to increase customer satisfaction with the customer support line.

17. Upon information and belief, Defendant (and/or others on its behalf) designed, customized and selected the personality exhibited by the virtual agent as well. This electronic persona was specifically selected to be appealing and attractive to Defendant's customers and to maximize utilization of the IVR system by such customers.

18. Upon information and belief, the information used by Defendant's IVR system (including e.g., the grammar used, specific questions to which it can respond, the interpretation of questions, and the answers to be given to customers) were derived by Defendant (and/or others on its behalf) from collecting and studying data from thousands of actual calls made to Defendant's customer support line. Based on this, Plaintiff believes that Defendant (and/or others on its behalf) has trained the IVR system with Defendant's call center data that is unique to Defendant's business. As a result, the IVR system is tailored to respond with appropriate answers to questions posed by Defendant's customer base.

19. Accordingly, Defendant's IVR system has been customized with customer content data that is not available from a third party. This Defendant-specific content data is critically important to the behavior and operation of Defendant's IVR system, since without it the IVR system would not know what

words to recognize from a caller's utterance, how to determine the meaning of such words, and/or what answer to give to the caller as a response.

20. Defendant's IVR system, as noted above, is a combination of components, including at least some hardware, software and content which it obtained from third parties (third party components). Nonetheless, and on information and belief, Defendant is responsible for and has caused such third party components to be combined, adapted and configured (including with such Defendant-specific content) in accordance with specific performance, content requirements and scenarios of the Defendant's customer support operations.

21. Consequently, and on further information and belief, the current structure and operation of Defendant's IVR system is a result of content contributions, performance specifications and operational specifications provided by Defendant and configuration/modification of third party components made by Defendant (and/or others on its behalf). Such third party components - as currently available from such third parties - by themselves would not be sufficient to implement Defendant's IVR system without Defendant's cooperation, contributions and actions, including Defendant's provision of the Defendant-specific content data.

22. On or about June 2, 2006, Plaintiff sent a letter to Defendant, stating that the IVR system is covered by one or more claims of the Patents in Suit. In that letter, Plaintiff included a number of supporting materials to explain its position on the Patents, and further extended an offer to license the Patents in Suit to Defendant. On or about June 27, 2006, Defendant responded, informing Plaintiff that it needed to investigate the matter and requested identification of the patent claims that may be infringed. On or about June 29, 2006, Plaintiff responded to Defendant, stating that Defendant may have overlooked the CD enclosed with the original letter which has extensive representative claim charts pointing out

particularly which claims Plaintiff believes are pertinent to Defendant's system and why. Some many months later on October 18, 2007, and having not heard from Defendant, Plaintiff sent another letter to Defendant to again negotiate a license and requested a response by no later than December 14, 2007. Defendant failed to respond in any meaningful way to the licensing offer or the charge of infringement, necessitating the filing of this action.

### **III. JURISDICTION AND VENUE**

23. This Court has original subject matter jurisdiction over Plaintiff's patent infringement claim pursuant to 28 U.S.C. §1338(a).

24. This Court has personal jurisdiction over Defendant because Defendant's corporate headquarters are located in San Francisco, CA.

25. Venue properly lies in the Northern District of California pursuant to 28 U.S.C. §1391 and §1400, because the acts complained of herein have been committed and are being committed in this Judicial District and Defendant is subject to personal jurisdiction within the District.

### **IV. FIRST COUNT FOR INFRINGEMENT OF UNITED STATES PATENT NO. 6,633,846**

26. Plaintiff hereby incorporates by reference the allegations contained in paragraphs 1 through 25.

27. Plaintiff is the assignee of the U.S. Patent No. 6,633,846 ("the '846 Patent"), attached hereto as Exhibit 1, entitled "Distributed Real Time Speech Recognition System". Plaintiff owns and has standing and capacity to sue and recover damages for infringement under the '846 Patent.

28. Defendant has violated Plaintiff's patent rights by operating an IVR system covered by at least one claim of the '846 Patent. Wells Fargo's infringing IVR system has not been manufactured or authorized in any manner by the Plaintiff.